DETAILED ACTION

1. This Office action is in response to the remarks filed on 08/25/2009.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Thomas C. Basso on 10/08/2009.

3. The application has been amended as follows:

3.1 Claims 22-34 have been **cancelled**.

Examiner's Statement of Reason for Allowance

4. Claims 18-19, 21 and 35 are allowed over the prior art of record.

5. The following is an examiner's statement of reasons for allowance: The claims, filed on 05/26/2009 have been carefully reviewed and searched.

6. Applicant's arguments, see pages 2-5, filed 08/25/2009, with respect to Claims 18-19, 21 and 35 have been fully considered and are persuasive. The rejection of

Claims 18, 19, 21 and 35 under 35 U.S.C. 103(a) as being unpatentable over JP 61-151241 A (Miyake) is withdrawn in view of applicant's remark. Specifically, Miyake failed to teach or suggest a ratio of the number of moles b (where b is the second compound) to the number of moles of the protoic dissociation group is between 10 and 30 as required by the instant claims.

7. The best new prior arts to U.S. Pat. 5,512,263 (McIntyre) and U.S. Pub. 2003/0087972 A1 (Taniguchi et al.) teach a proton conductive membrane. McIntyre teaches a membrane comprising of a sulfonic acid containing polymer, e.g. PFSA, wherein a solution containing dimethylformamide (DMF) can be used to impregnate said membrane (Col. 4, lines 47-56). The sulfonic acid containing polymer is considered as a first compound wherein the protoic dissociation group (X) is sulfonic acid group. The DMF is considered as a second compound where R2 and R3 include carbon, i.e. methyl group. McIntyre failed to teach or suggest the molar ratio between the DMF to the protoic dissociation group (X) within the range of 10 to 30 as required by the instant claims. Taniguchi et al teaches a membrane comprising of a main-polymer having protoic dissociation group such as sulfonic groups and carboxylic groups [0013] that can be impregnated with a sub-polymer having protoic dissociation group such as sulfonic groups and carboxylic groups [0017 and 0030] in the present of dimethylformamide [0059 and 0061]. However, Taniguchi et al also teach or suggest the molar ratio between the DMF to the protoic dissociation group (X) within the range of 10 to 30 as required by the instant claims. The prior art alone or in combination failed to suggest a proton conductor wherein the number of moles of the second compound, e.g. DMF, is

associate with the number of moles of the protoic dissociation group. Therefore, Claim 18 is allowed over the prior art of record. Claims 19, 21 and 35 are allowed based on their dependencies to Claim 18.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHANH T. NGUYEN whose telephone number is (571) 272-8082. The examiner can normally be reached on Monday-Friday 7:00-4:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Kopec/
Primary Examiner, Art Unit 1796

//Khanh Tuan Nguyen//
Examiner
10/08/2009